

Claims 3, 6, 11, 12 and 13-30 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants respectfully submit that the amendments to the claims fully address the Examiner's objections.

Claims 1, 7 – 16 and 20-30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,237,520 to White in view of U.S. Patent No. 5,449,256 to Sundman.

Amended claim 1 recites a method of forming a custom made insole, including the steps of randomly positioning a foot to be measured on a laser scanning station and passing at least one laser scanning unit along an undersurface of the foot. The undersurface of the foot is scanned with at the at least one laser scanning unit by directing at least one line of laser light along the undersurface. The surface coordinates of the undersurface detected by the at least one laser scanning unit are measured. The measured surface coordinates are processed. The processed measured surface coordinates are transmitted to a data processing unit. A custom made insole based on the transmitted surface coordinates is then milled.

White does not disclose, or suggest, scanning the undersurface of a foot with at least one laser scanning unit by directing at least one line of laser light and measuring surface coordinates of the undersurface detected by the at least one laser unit and processing the measured surface coordinates as recited in amended claim 1. In contrast, White does not use laser scanning units but rather merely takes a photo of the bottom of the foot and measures intensity of the pressure of the foot on a plate. As disclosed by White, the scanner unit 100 derives a topographical image of the customer's feet. See Column 2, lines 61 through 64. As disclosed in Column 5, lines 5 through 35, the scanner unit 134

of White provides a precision contour mapping of bottom surfaces of a scanned foot by determining the intensity of lightness and darkness of portions of the scanned foot image with respect to other portions of the scanned foot image. Image portions which are generally lighter in color or intensity are designated as being closer to the scanner unit than portions of the foot which are darker in color or intensity. The color of the surface of the foot pressed against the surface of the scanner may vary according to the amount of pressure applied to the surface of the scanner unit in direct correlation to the amount of blood flowing through the foot surface at that particular point. Foot surfaces under extreme pressure will be lighter in color hue than foot surfaces under less pressure which can be generally pinkish or skin-tone in color. Thus, White measures the contours of the foot by defining a topographical image which is in contact with the surface of the scanner. Thus, White does not measure surface coordinates of the undersurface of the foot, but rather measures the relative pressure between the surface of the foot and the scanner.

Independent claim 13 recites a system for forming a custom made insole comprising at least one scanning station for supporting a foot to be measured. This scanning station includes at least one moveable laser scanning unit for determining coordinates of an undersurface of the foot by directing at least one line of laser light along the undersurface.. At least one milling station is in communication with the scanning station. The milling station includes a milling assembly for forming the custom made insole. Control means control the operation of the milling assembly based upon the coordinates determined by the at least one laser scanning unit.

As set forth previously, White does not disclose at least one moveable laser scanning unit which determines coordinates of an undersurface of the foot. White's scanner 134 merely takes a photograph of the bottom of the foot which, indicates the different pressure areas of the foot on the scanner by a variety of different colors.

To cure the deficiencies of White, the Examiner has cited the reference to Sundman. Sundman, like White, does not disclose at least one laser scanning unit which measures surface coordinates of the under surface of the foot.

Given the above, neither White nor Sundman either alone, or in combination, disclose the claimed subject matter.

Claims 1 - 4 and 6 have been rejected under 35 U.S.C. 103a as being unpatentable over White and Sundman and further in view of applicants admission of prior art on page 8 lines 11 - 15.

In the specification as originally filed on page 8, lines 10 - 15 recites that laser technology used in scanners 100 is disclosed in U.S. Patent Nos. 4,645,347; 5,270,795; 4,658,368 and 4,819,197.

One having ordinary skill in the art would not be motivated to combine the references as recited by the Examiner without impermissible insight. White offers no motivation to completely change its method of operation of assigning distances based on color hue with laser triangulation techniques as suggested by the Examiner. Therefore, claims 1, 3, 4 and 6 are allowable.

In summary, none of the prior art, either alone or in combination, discloses the claimed subject matter. A prompt passage to issuance is therefore earnestly solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Corinne R. Gorski", is written over a horizontal line.

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